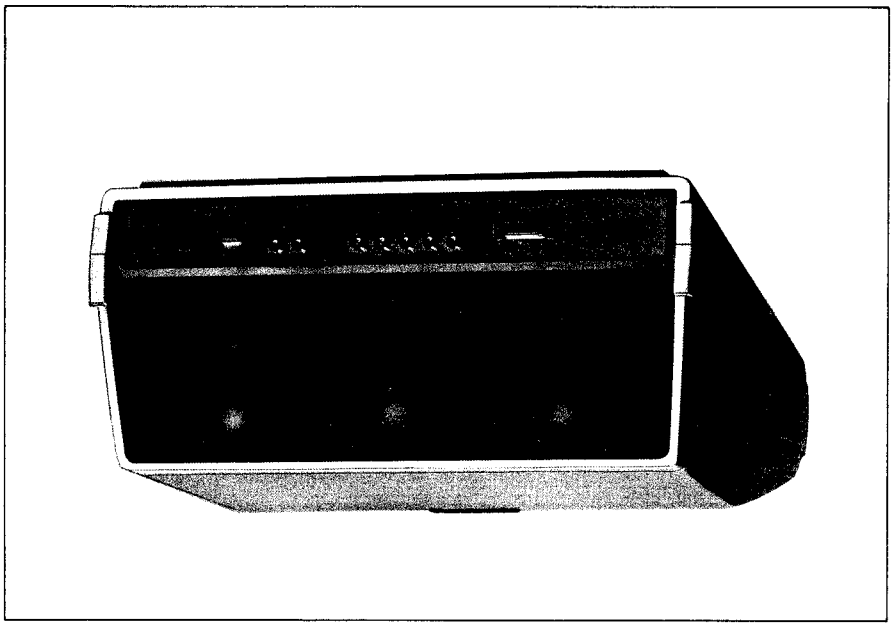
Panasonic

Colour Video Projector

Model No. PT-302Y



Operating Instructions

Operating Instructions ..... 1~15
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Manual de instrucciones ..... 64~79

Read these instructions completely, before operating this set.

ENGLISH

Dear Panasonic Customer

Welcome to our Panasonic family of customers. It is our desire that you have many years of enjoyment from your new Colour Video Projector. In keeping with the state of the art, we have built quality, reliability, and performance into your unit. However, for best performance, a Colour Video Projector should be suitably positioned in the viewing area and properly adjusted.

This instruction booklet provides all the necessary operating information. We hope it will help you to get the most enjoyment out of your new product, and that you will be pleased with your Panasonic Colour Video Projector.

■ **Customer's Record**

The serial number of this product may be found on its back cover. You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid in identification in the event of theft or loss.

Model number: **PT-302Y** Serial number:

CAUTIONS

WARNING: To prevent damage which may result in fire or shock hazard, do not expose this appliance rain or moisture.

WARNING: 1) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

2) Do not remove the grounding pin on the power plug. This apparatus is equipped with a three prong grounding-type power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the grounding plug.

IMPORTANT: AC POWER CORD CONNECTION

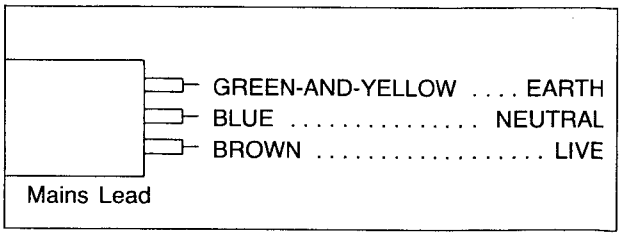
■ U.K. only

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
GREEN-AND-YELLOW: EARTH, BLUE: NEUTRAL, BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.
- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
- The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Note: This apparatus must be earthed.



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FEATURES

[1] Superb bright picture.
High luminance output:
Light flex···650 lumens (typical) at white peak

[2] Superb resolution.
RGB··· 1000 TV lines (typical)
Video···650 TV lines (typical)
RGB character reproduction: equivalent to 2000 characters (80 x 25)

[3] Compact size and light weight (35 kg, 77lbs), for easy placement/installation.

[4] Compatibility with various signal input sources.
VTR/VCR Video Disk
Video Camera RGB Computer
TV Tuner

[5] Improved raster quality.
High voltage regulation characteristic: 0.3 MΩ

[6] Ceiling/floor installation and front/rear projection easily selectable.
- Ceiling mount/front projection
- Ceiling mount/rear projection
- Floor placement/front projection
- Floor placement/rear projection
- Ceiling mount rear projection with mirror
- Floor placement rear projection with mirror

[7] Wide-range computer compatibility.

[8] Four broadcast system capability.
- PAL, SECAM, NTSC and M-NTSC 4.43

[9] This device is an available for S-Video signal.
If the S-Video signal is connected, then a high quality, clear image can be obtained.

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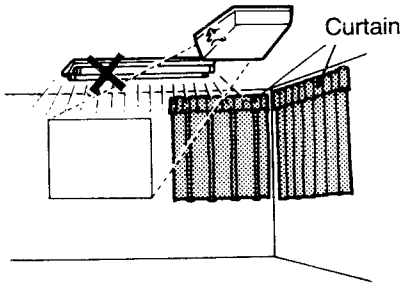
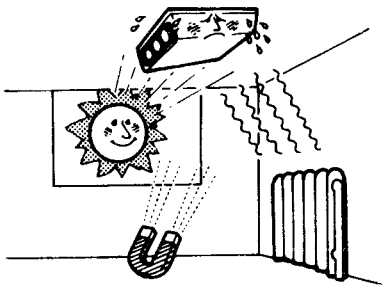
CARE AND LOCATION OF YOUR COLOUR VIDEO PROJECTOR

1. VIDEO PROJECTOR LOCATION

1) Adequate ventilation is essential to prevent internal component failure. Avoid placing the Colour Video Projector near areas of excessive heat, moisture, direct sunlight or on unstable mounting surfaces.
2) Do not position magnetic equipment near the Colour Video Projector.

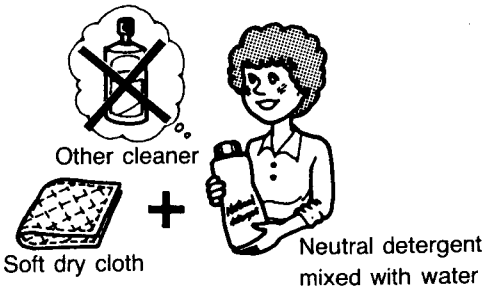




2. VIDEO PROJECTOR AND LENS CARE

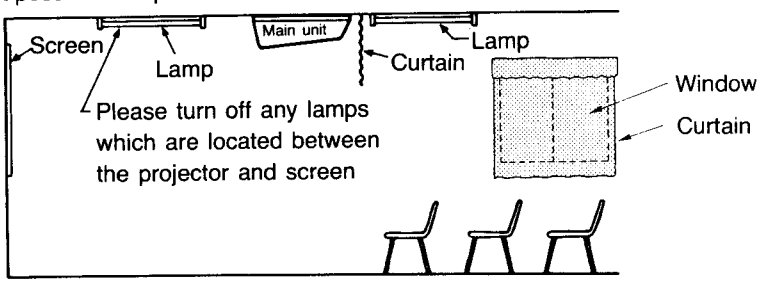
The Video Projector can be kept in good condition by wiping it with a clean, soft, dry cloth.

Note: For general safety, the power switch should be turned OFF when attempting to do so.
It is important not to use any other kind of cloth, because damage to the surface of the lenses may occur and this will directly effect picture performance.



3. OPTIMIZING VIEWING

To obtain the maximum contrast possible in a particular installation, minimize any ambient light which may fall on the screen.



PRECAUTIONS TO BE OBSERVED

1. Secure service anytime the Projector is damaged or fails. A distinct change in performance may also indicate a need for service.
2. Do not attempt to service this Colour Video Projector yourself by opening or removing covers that may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.
3. Remove the power plug from the wall socket when the Projector is not in use for a prolonged period of time, or if the Projector is not functioning properly.

CONDENSATION

When the Projector is moved into a warm room from a cold area, the picture may become out of focus because of condensation on the lens surface due to the temperature change. Picture will become clear when the set reaches the same temperature as the surroundings.

LOCATION OF CONTROLS

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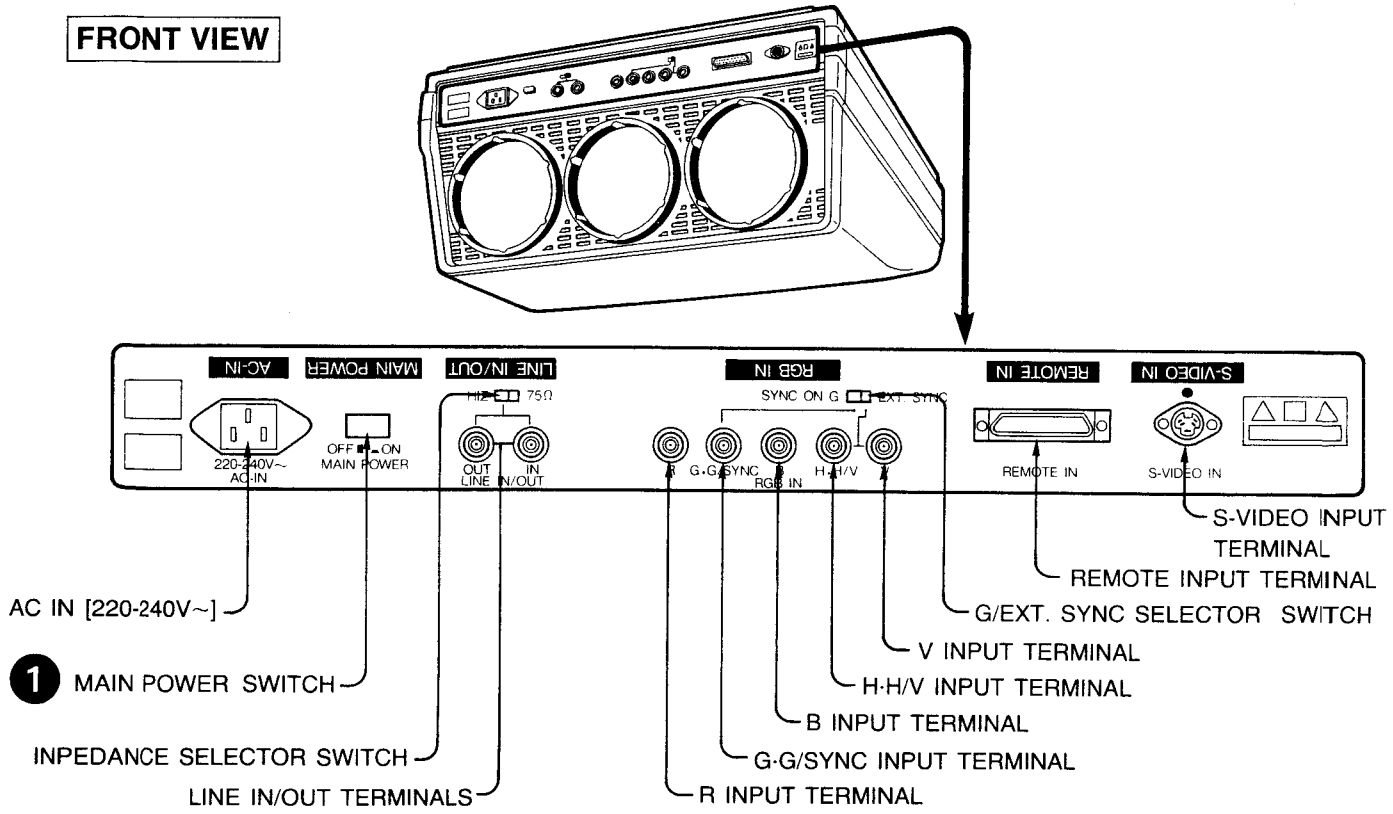
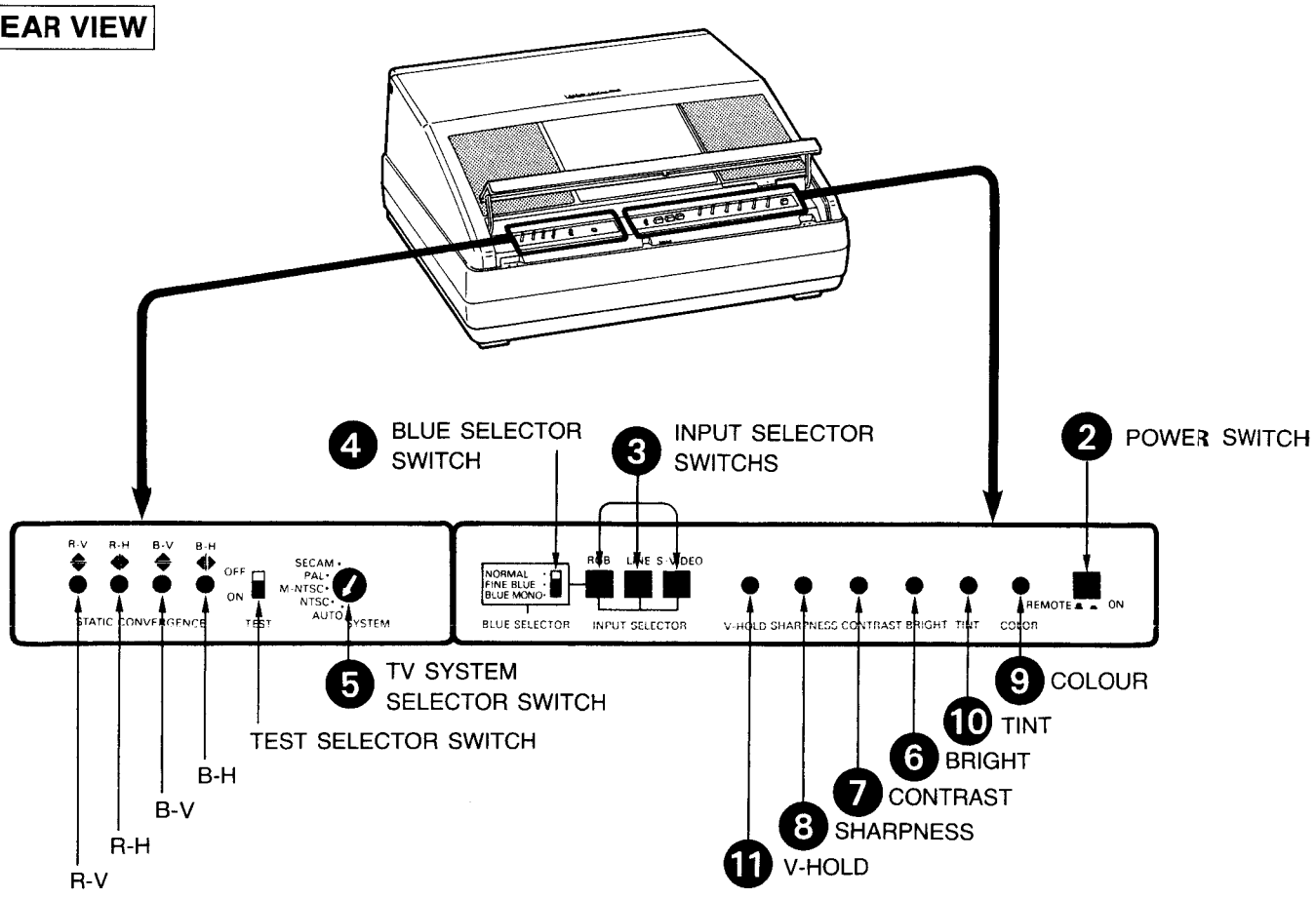
FRONT VIEW



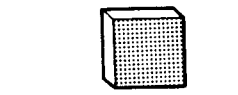
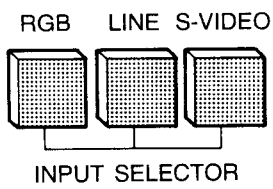
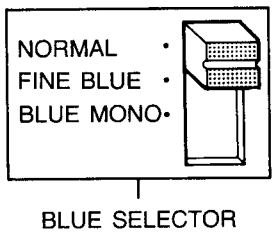
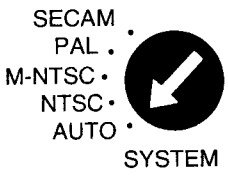
REAR VIEW



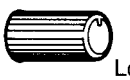
ENGLISH

OPERATION

To operate the projector switches ❶ and ❷ must be turned ON, and switch ❸ must be set to the proper input signal type.
Note: When the separately supplied remote controller (ET-12RY) is connected to the video projector, switches ❷ through ❹ and ❻ through ❿ are inoperable. Please use the remote controller for these functions.

No.	Switch.	Purpose
❶	**MAIN POWER SWITCH**	Switches main power supply ON/OFF.
❷	**POWER SWITCH**	Power ON/OFF switch.  This switch is set to the REMOTE position (▮), when the remote control is in use.
❸	**INPUT SELECTOR SWITCHES**	 S-VIDEO··· Push this button to view signals inputted via the S-VIDEO input terminal. LINE ··· Push this button to view signals inputted via the LINE input terminal. RGB ··· Push this button to view signals inputted via the RGB input terminal.
❹	**BLUE SELECTOR SWITCH**	 This switch is operable only when RGB signals are being received. Use this switch when the blue portion of the picture is weak. NORMAL ···Normal blue. FINE BLUE ···A finer, easier-on-the-eye, blue. BLUE MONO···White picture on a blue back ground. **Note:** When Linear or TTL RGB signals are input at inappropriate levels, the FINE BLUE and BLUE MONO modes might not operate properly.
❺	**TV SYSTEM SELECTOR SWITCH**	 This switch is normally set at AUTO. However, if the picture quality is poor due to the use of dubbed tapes, etc., reception may not be satisfactory. In that case, set the switch to the appropriate input signal using a screwdriver.

USE OF CONTROLS

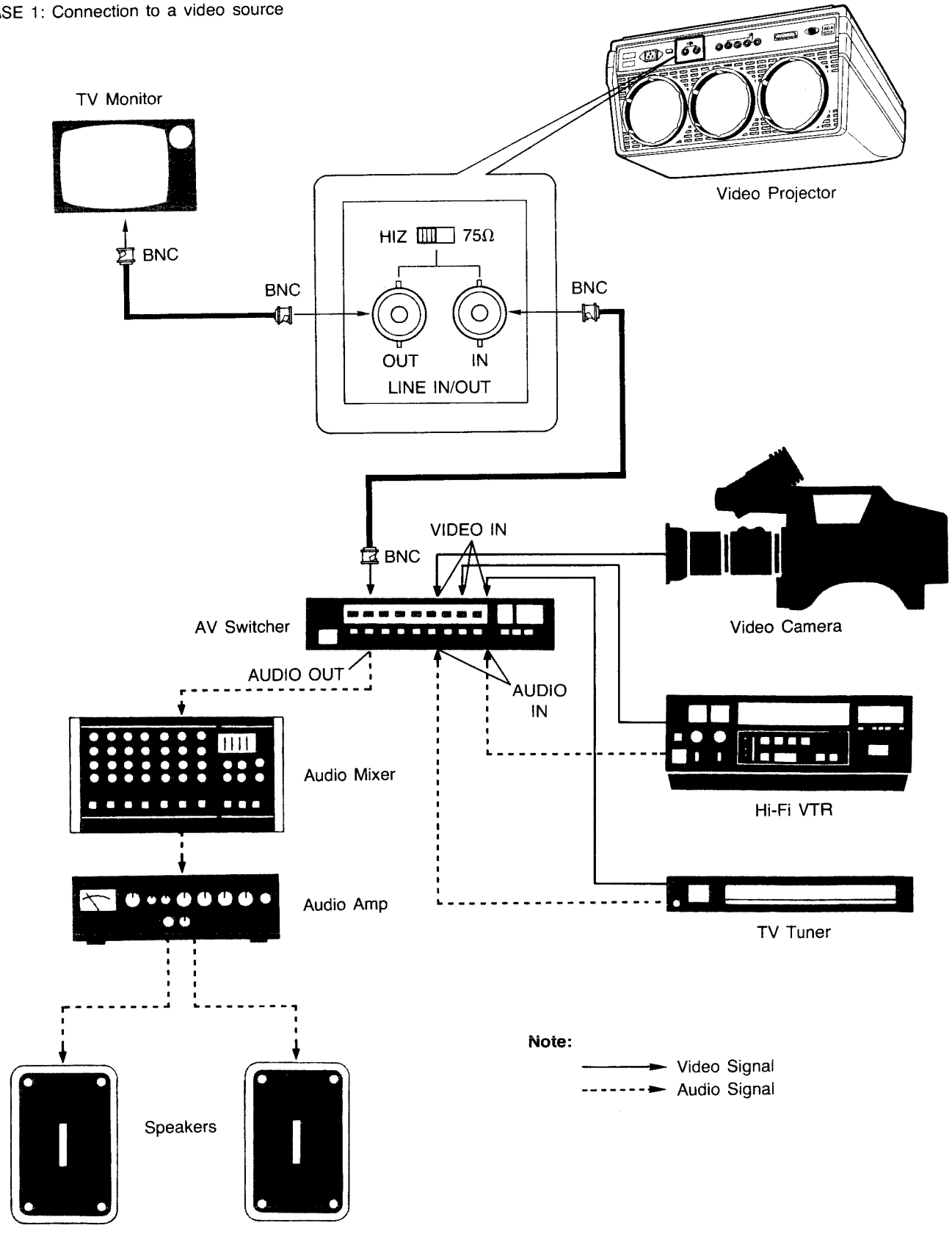
No.	Control	Purpose
6	BRIGHT	Decrease Increase The click-stop indicates standard, brightness. Adjust to the appropriate brightness level existing conditions.
7	CONTRAST	Decrease Increase Adjust to a desirable colour intensity.
8	SHARPNESS	Soft Sharp To obtain a sharper picture rotate the control clockwise. For a softer picture rotate the control counter-clockwise.
9	COLOUR	 Low Colour High Colour Adjust to a comfortable viewing level, a slightly less intense picture is easier on the eyes.
10	TINT	Red Green Adjust for proper skin tone.
11	V-HOLD	Up Down If the picture rolls, as shown, adjust the control Up or Down until it is stabilized. **Note:** For V-Hold adjustments in RGB mode, call a serviceman.

ENGLISH

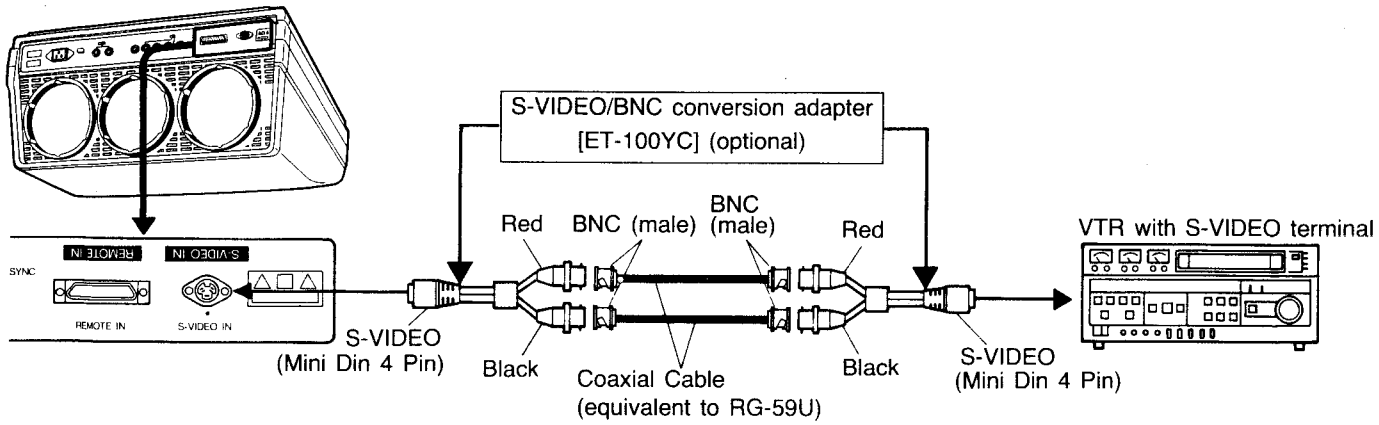
CONNECTING OPTIONAL EQUIPMENT

Connect optional equipment according to following illustration.

CASE 1: Connection to a video source



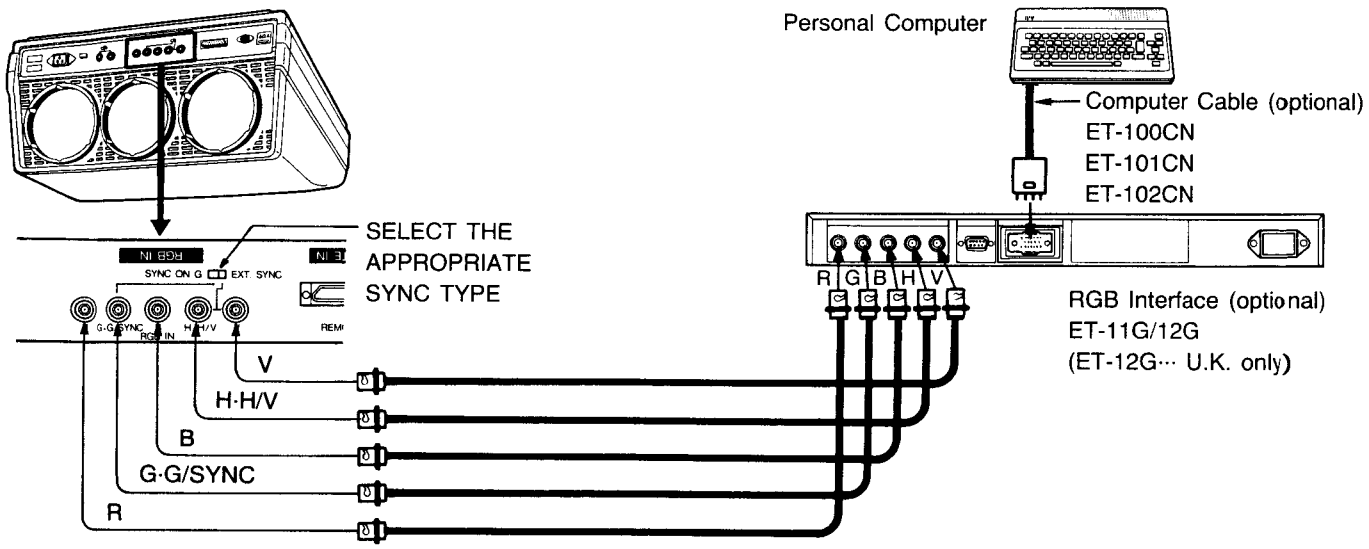
CASE 2: Connection to a S-VIDEO source



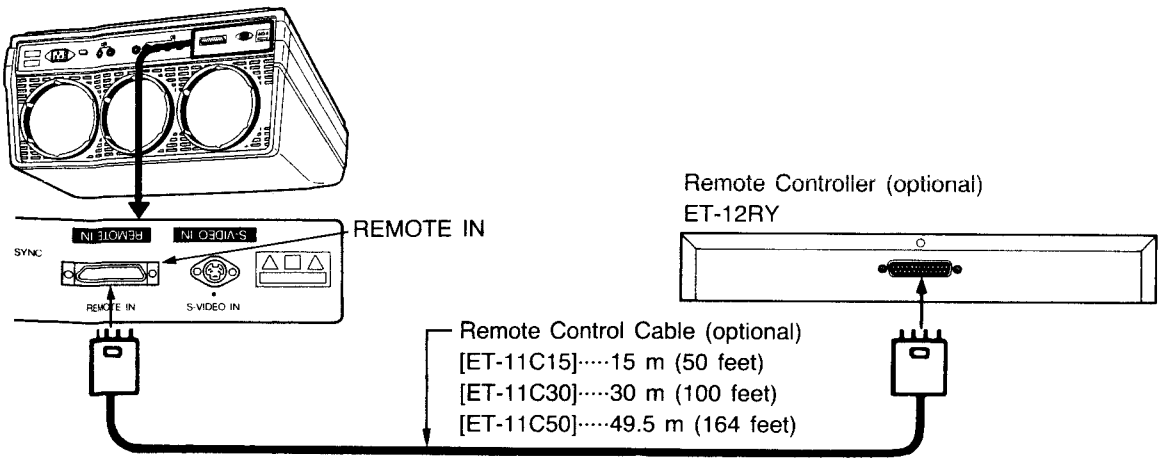
Note:

1. It is recommended that the coaxial cables used are of equal length and that this length not exceed 100 meters (328 feet). Exceeding this length will have an adverse effect on Y/C signal transmission.
2. The connectors are colour keyed; the Y signal connector is Red and the C signal connector is Black. Care should be exercised in insuring proper "Red" to "Red" and "Black" to "Black" cable connection.
3. Care should be taken to provide "Strain relief" for the S-Video connectors to prevent connector damage or loss of connection.

CASE 3: Connection to the RGB interface ET-11G/12G (optional)



CASE 4: Connection to the remote controller ET-12RY (optional)



ENGLISH

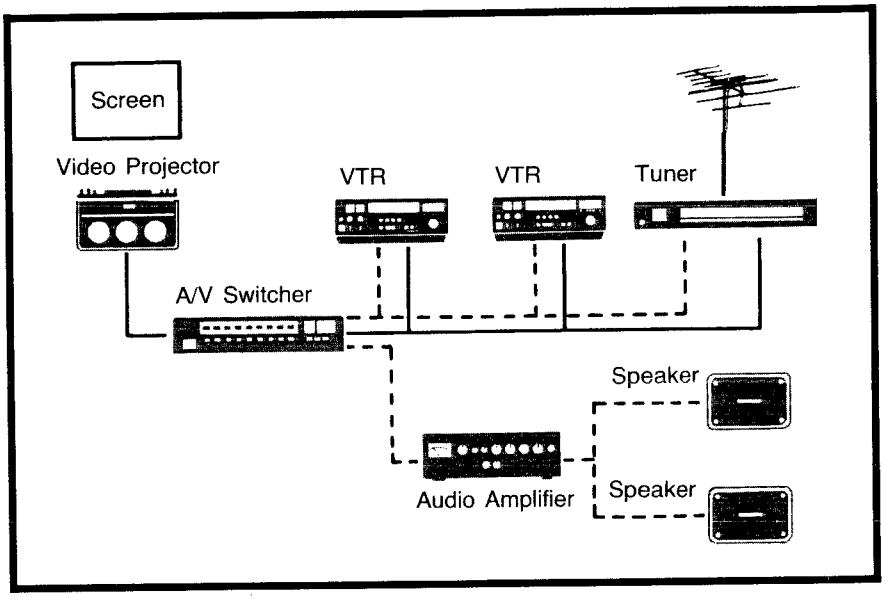
SYSTEMS APPLICATIONS

EXAMPLE 1

Presentation System

This is the most orthodox VTR playback system. Variations can be developed on this system according to the required applications.
Applications:

- Conference Rooms
- Classrooms
- Public Areas

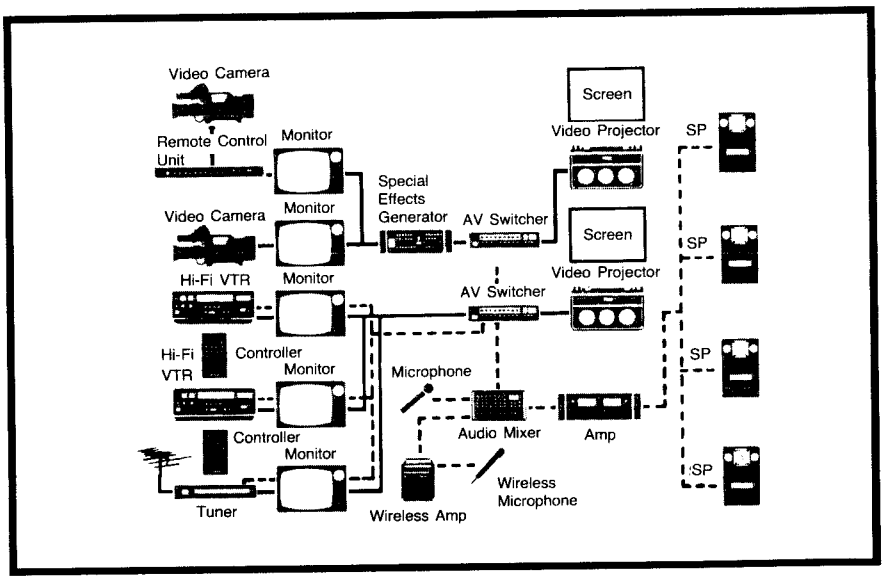


EXAMPLE 2

Entertainment System 1

This system is ideal social gatherings, ceremonies, etc. to be held in large places. Great effects are possible with the powerful video images from colour video projectors, when they are combined with video cameras and audio equipment.
Applications:

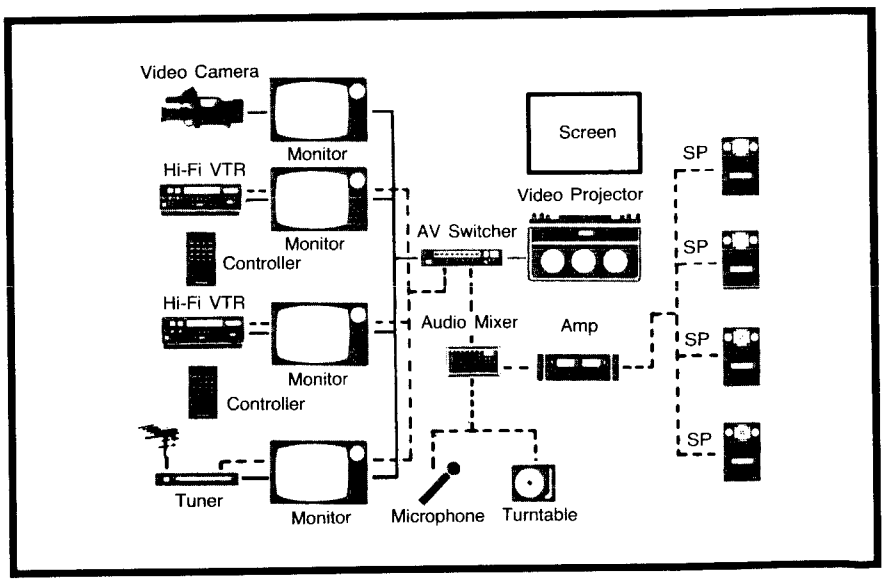
- Banquet Halls
- Lounges, Discos



Entertainment System 2

This system is particularly suited to such recreational facilities as bars, restaurant, dance clubs, etc. A wide variety of artistic effects can be produced. When used together with stereo sound, a relaxed aura of "background video" and "mood" music, or dynamic video images with music with a beat to match.
Applications:

- Lounges, Discos
- Restaurants



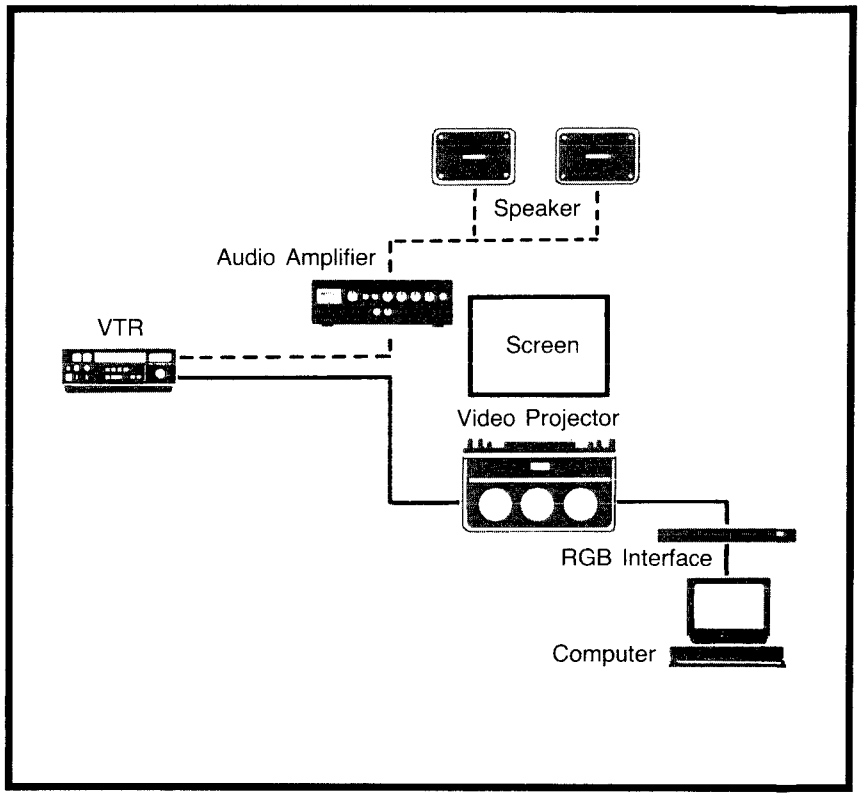
EXAMPLE 3

Business Application

This system is designed to concentrate on data presentations for business, conferences, showrooms, etc. Its superb resolution and capacity to match various types of personal computers make it ideal for upgrading office-automation systems and diversifled video/data services.

Applications:

- Conference Rooms
- Training Areas
- Information Displays



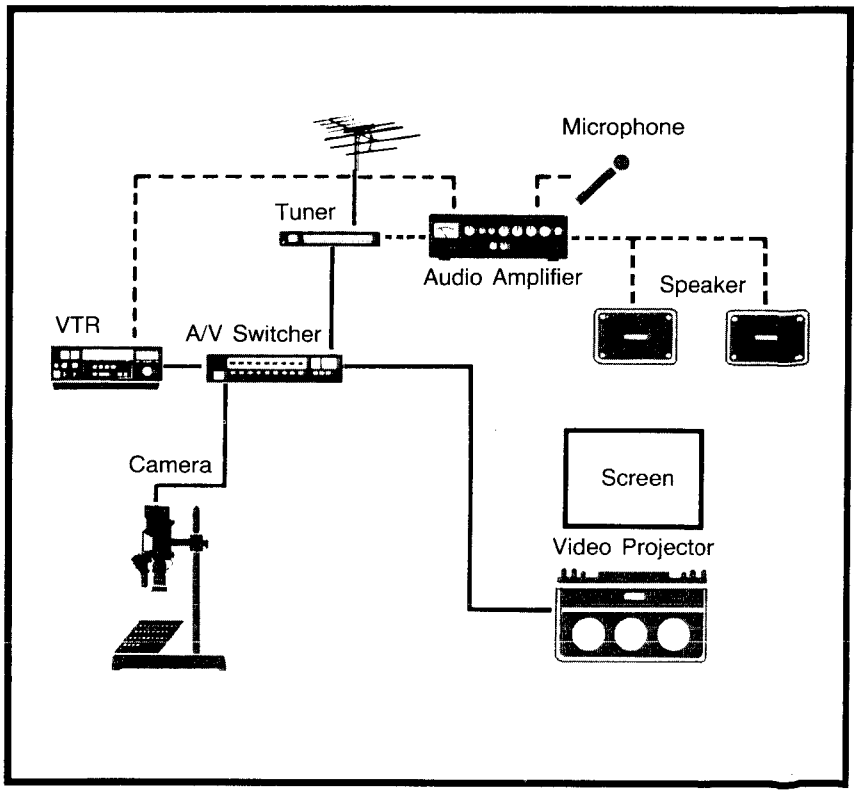
EXAMPLE 4

Educational System

Ideal for a wide range of educational activities, particularly as an effective teaching aid.

Applications:

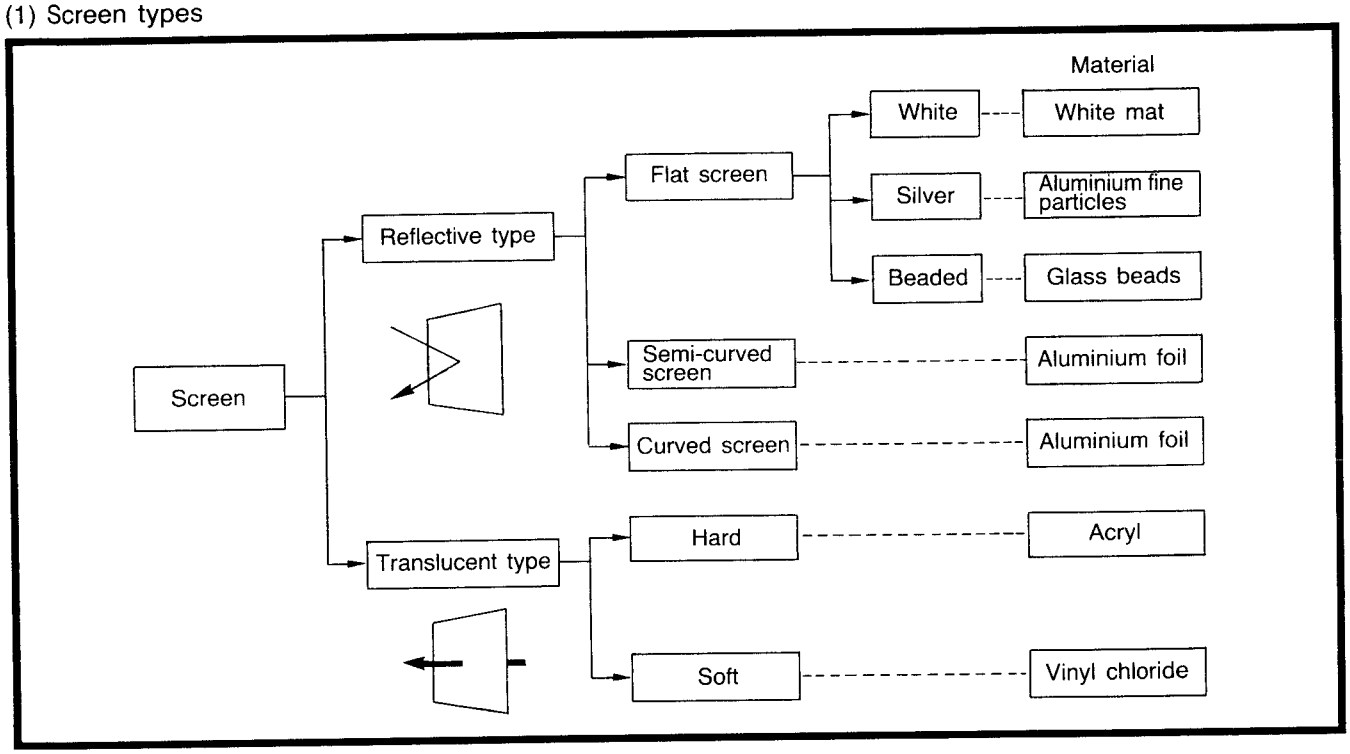
- Classrooms
- Audioriums
- Lecture Halls



SCREENS

■ Screen types and features

(1) Screen types



(2) Screen features

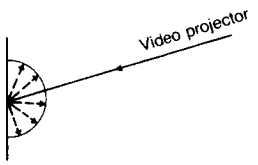
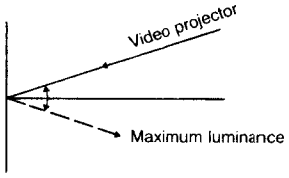
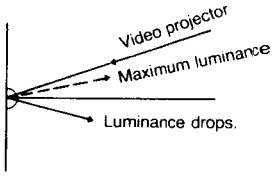
• Reflective type (Comparison of performance by material)

Type	Viewing angle	Brightness	Disadvantage	Advantage
White	Wide	Average	Lower Brightness	Generally viewable from any position
Silver	Narrow	Above Average	Appears dark if outside of optimum viewing angle.	Picture has 3 dimensional feeling
Beaded	Narrow	Best		High Brightness

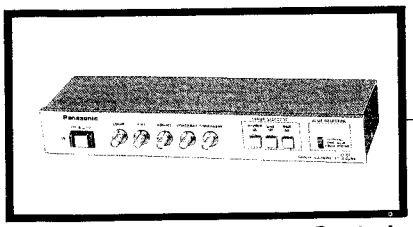
• Translucent type (Data compared between conventional Hard and Soft Screens)

Type	Luminance (X mat white)	Transparency ratio	Feature
Hard	2.3	71%	Good transparency ratio, but size limitation excellent durability
Soft	2.0	54%	Can be rolled to vary screen size.

• Comparison of performance by form

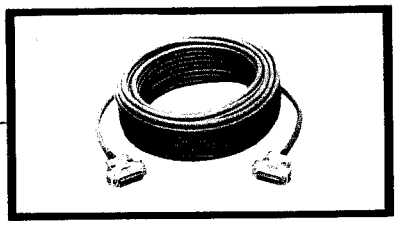
Flat screens	
Type	Feature
White screen	Viewable from any position with no limitation of the field of view; however, like a theater, a clear picture cannot be expected except in a dark environment. 
Silver screen	Image brightness is 2 to 4 times that of a white screen. Various types offered by screen manufacturers, each with different brightness characteristics. Some do have a limited field of vision. **Note:** That types with high gain are apt to have colour shadings at the left and right sides. 
Beaded screen	In the same way as silver screens, the picture is bright, etc.; no colour shadings at left and right sides. **Note:** That light is reflected in same direction as angle of incidence. 

OPTIONAL ACCESSORIES



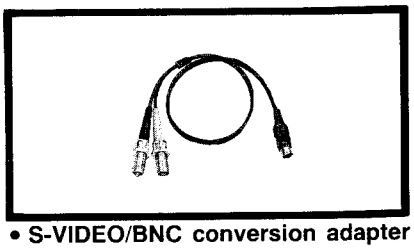
• Rack Mountable Remote Control Unit [ET-12RY]

Dimensions: (W) 311 mm ($12^{3}/_{16}$ inches)
(D) 113 mm ($4^{13}/_{32}$ inches)
(H) 43.7 mm ($1^{11}/_{16}$ inches)
Mass (weight): 0.95 kg ($2^{3}/_{32}$ lbs)



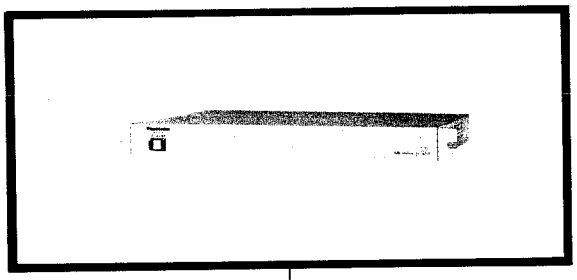
• Remote Control Cable

[ET-11C15] 15 m (50 feet)
[ET-11C30] 30 m (100 feet)
[ET-11C50] 49.5 m (164 feet)



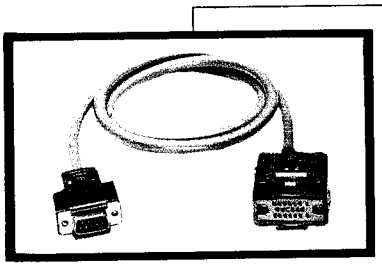
• S-VIDEO/BNC conversion adapter [ET-100YC]

(2 pcs)



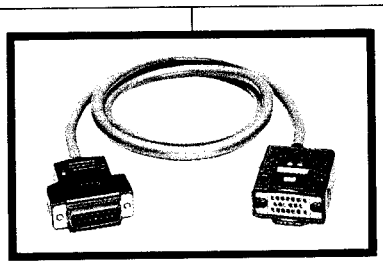
• Rack Mountable RGB Interface [ET-11G/12G]

Power Source . . Alternating Current (AC) 220-240V 50/60Hz (ET-11G)
Alternating Current (AC) 240V, 50Hz (ET-12G)
Power Consumption . . . . . 14W (average)
Mass (weight) . . . . . 3.2 kg ($7^{1}/_{32}$ lbs)
Dimensions . . . . . (W) 430 mm ($16^{29}/_{32}$ inches)
(D) 280 mm (11 inches)
(H) 43.7 mm ($1^{11}/_{16}$ inches)
RGB Output . . . . . R: 0.7±0.2Vp-p 75Ω
G: 0.7±0.2Vp-p 75Ω
B: 0.7±0.2Vp-p 75Ω
H: 0.7±0.3Vp-p 75Ω
V: 0.7±0.3Vp-p 75Ω



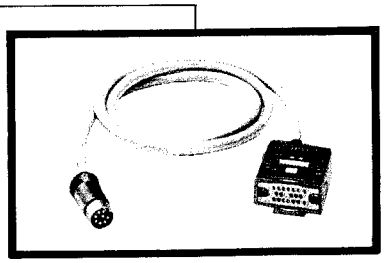
• Computer Cable [ET-100CN]

IBM, IBM compatible, PANASONIC
(20P-9P)



• Computer Cable [ET-101CN]

APPLE III
(20P-15P)



• Computer Cable [ET-102CN]

NEC
(20P-8P)

Note:

This Operating Instructions is intended for the following territories. "Europe, Asia, Middle Near East, Latain America and Africa." Consequently, it should be noted that the aforementioned optical accessories may not be handled in some areas.

SPECIFICATIONS

Power Source	Alternating Current (AC) 220-240V, 50/60Hz
Power Consumption	189W
Projection Tube	7 inch specially developed high-Brightness liquid cooled CRTs (R, G, B).
Lenses	Double Focus, Three F 1.0 f145 Lenses (HYBRID)
Resolution	Video ··· 650 TV lines (typical) RGB ··· 1000 TV lines (typical)
S-Video Input Level	Y: 1±0.3Vp-p 75Ω, C: 0.286Vp-p
Line In/Out Level	1±0.3Vp-p 75Ω or high impedance
RGB Input Level	R: 0.7±0.3Vp-p 75Ω G: 0.7±0.3Vp-p 75Ω (G/SYNC: 1±0.3Vp-p 75Ω) B: 0.7±0.3Vp-p 75Ω H·H/V: 0.3~6V high impedance V: 0.3~6V high impedance
Dimensions	Width 576 mm ($22^{11}/_{16}$ inches) Depth 606 mm ($23^{29}/_{32}$ inches) Height 290 mm ($11^{13}/_{32}$ inches)
Mass (weight)	35 kg (77 lbs)
Screen Size	3810 ~ 7620 mm (150 ~ 300 inches)
Throw Distance	3810 mm (150 inches) Picture size: 4528 mm ($178^{1}/_{4}$ inches) 4318 mm (170 inches) Picture size: 5102 mm ($200^{7}/_{8}$ inches) 5080 mm (200 inches) Picture size: 5963 mm ($234^{3}/_{4}$ inches) 6350 mm (250 inches) Picture size: 7400 mm ($291^{11}/_{32}$ inches) 7620 mm (300 inches) Picture size: 8835 mm ($347^{27}/_{32}$ inches)
Light Flux	650 lumens (typical) at white peak
Operating Ambient Temperature	32°F~104°F (0°C~+40°C)
Operating Ambient Humidity	20%~80%
Supplied Accessories	Alternating Current (AC) Cord AC Mains Lead Mounting kit (1 set)
Options	Remote Controller ET-12RY RGB Interface ET-11G, ET-12G (U.K. only) Remote Control Cable ET-11C15 15 m (50 feet) ET-11C30 30 m (100 feet) ET-11C50 49.5 m (164 feet) Computer Cable ET-100CN (20P- 9P) (IBM, IBM compatible, PANASONIC) ET-101CN (20P-15P) (APPLE III) ET-102CN (20P- 8P) (NEC) S-VIDEO/BNC Conversion Adapter ET-100YC (2 pcs)

Specifications are subject to change without notice.